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ARTIFICIAL INTELLIGENCE ADOPTION AND HIRING EFFICIENCY OF COMMERCIAL BANKS IN RIVERS STATE, NIGERIA

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Abstract

This study investigated the impact of Artificial Intelligence Adoption (AI) and Hiring Efficiency of commercial banks in Rivers state in commercial banks, Nigeria. This study adopts a correlational survey research design to examine the relationships between the use of Artificial Intelligence Adoption (specifically resume screening AI and chatbots/virtual assistants) and Hiring Efficiency outcomes Quality-of-Hire Efficiency and Retention Rate Efficiency in commercial banks in Rivers State, Nigeria. The population consists of all Human Resource (HR) management personnel in commercial banks operating within Rivers State. Specifically, it includes one recruitment officer, HR manager and her assistant. According to industry reports, there are approximately 23 commercial banks with an estimated total of 69 human resource management personnel. Utilizing a quantitative correlational research design, data were collected from 60 respondents across selected banks and analyzed using Pearson correlation. Findings revealed a statistically significant and moderately strong positive relationship between Resume Screening AI and Retention Rate Efficiency ($r = 0.607$, $p < 0.01$). Furthermore, Chatbots/Virtual Assistants AI showed a strong positive correlation with both Quality-of-Hire Efficiency ($r = 0.812$, $p < 0.01$) and Retention Rate Efficiency ($r = 0.727$, $p < 0.01$). These results indicate that AI technologies are becoming critical tools in enhancing HR functions and operational efficiency in the banking sector. The study concludes that Artificial Intelligence Adoption applications, particularly Resume Screening tools and Chatbots/Virtual Assistants, have a significant and positive impact on HR efficiency in commercial banks in Rivers State. The study recommended among others that Commercial banks should invest in and implement AI-driven resume screening systems to enhance the efficiency and objectivity of the recruitment process, thereby improving employee retention outcomes.

Introduction

Background to the study

Artificial Intelligence Adoption (AI) is increasingly transforming recruitment processes across various sectors, including banking. In Rivers State, Nigeria, commercial banks are adopting AI technologies such as resume screening tools and chatbots to enhance recruitment efficiency. These innovations aim to improve key performance indicators like quality-of-hire and retention rates, which are critical for maintaining a competitive workforce in the banking industry. AI-driven resume screening tools utilize machine learning algorithms to analyze and evaluate job applications, identifying candidates whose qualifications align with job requirements. This automation expedites the recruitment process, reduces human bias, and ensures a more objective selection of candidates (Tambe, Cappelli, & Yakubovich, 2019). In Nigerian commercial banks, the integration of AI in recruitment has led to more efficient hiring processes, allowing HR departments to manage large volumes of applications effectively.

Furthermore, AI-powered chatbots serve as virtual assistants, engaging with candidates during the recruitment process. These chatbots can answer frequently asked questions, schedule interviews, and provide real-time updates, thereby enhancing candidate experience and engagement (Akinnagbe & Akintayo, 2023). Nigerian banks like UBA and Zenith Bank have implemented chatbots such as Leo and Ziva, respectively, to facilitate customer interactions and support recruitment activities (Businessday NG, 2024). The adoption of AI in recruitment processes has significant implications for recruitment efficiency, particularly concerning quality-of-hire and retention rates. AI

systems can analyze vast datasets to predict candidate success, leading to hires that are more likely to perform well and remain with the organization long-term (Businessday NG, 2024). By aligning candidate profiles with organizational needs and culture, AI enhances the quality of hires, thereby improving overall workforce performance.

Moreover, AI tools assist in monitoring employee performance and engagement, providing insights that can inform retention strategies. By identifying patterns and early signs of disengagement, banks can implement proactive measures to retain valuable employees, reducing turnover rates and associated costs (Businessday NG, 2024). Despite the growing adoption of AI in recruitment, there is a notable gap in empirical studies focusing on the specific impact of AI technologies like resume screening and chatbots on Hiring Efficiency in commercial banks within Rivers State, Nigeria. Existing research primarily examines the general benefits of AI in recruitment without delving into the contextual factors influencing its effectiveness in the Nigerian banking sector. This study aims to fill this gap by providing empirical evidence on how AI-driven recruitment tools affect quality-of-hire and retention rates in commercial banks operating in Rivers State. In Rivers State, the integration of AI in recruitment processes within commercial banks is not only streamlining hiring practices but also contributing to improved recruitment efficiency. By leveraging AI technologies such as resume screening and chatbots, banks are enhancing the quality of hires and fostering better retention rates, positioning themselves for sustained success in a competitive financial landscape.

Statement of the problem

Recruitment is a critical function in human resource management, especially in the banking sector where the quality and stability of employees directly influence organizational performance. In recent years, the application of Artificial Intelligence Adoption (AI) technologies such as resume screening systems and chatbots has gained traction globally and within Nigeria. These tools are designed to enhance Hiring Efficiency by improving the quality-of-hire and retention rates. However, in Rivers State, Nigeria, the extent to which these AI-driven tools have effectively improved recruitment outcomes in commercial banks remains unclear. Despite increased investment in AI technologies by Nigerian banks, there is limited empirical evidence on how these innovations impact Hiring Efficiency metrics. Many commercial banks in Rivers State continue to face challenges such as prolonged recruitment cycles, mismatch between candidates' competencies and job requirements, and high employee turnover rates. This raises concerns about the actual effectiveness of AI in delivering on its promise of optimizing hiring outcomes. While AI is expected to eliminate human bias, enhance candidate screening, and streamline interactions through virtual assistants, the real-world impact on recruitment outcomes like quality-of-hire and retention remains under-researched in this region. Furthermore, most existing studies have focused on the benefits of AI in developed economies or large metropolitan areas in Nigeria, often ignoring the operational realities of banks in semi-urban or regional contexts like Rivers State. This geographic and contextual gap limits the applicability of generalized findings and calls for a localized investigation. Without such empirical insights, banks in Rivers State may either underutilize or misapply AI technologies, resulting in poor return on investment and continued inefficiencies in recruitment. Therefore, this study seeks to address the gap by examining how AI tools specifically resume screening AI and virtual assistant chatbots affect recruitment efficiency, focusing on quality-of-hire and employee retention within commercial banks in Rivers State. By doing so, the study aims to provide evidence-based recommendations for optimizing AI deployment in human resource practices in the local banking sector.

Conceptual framework

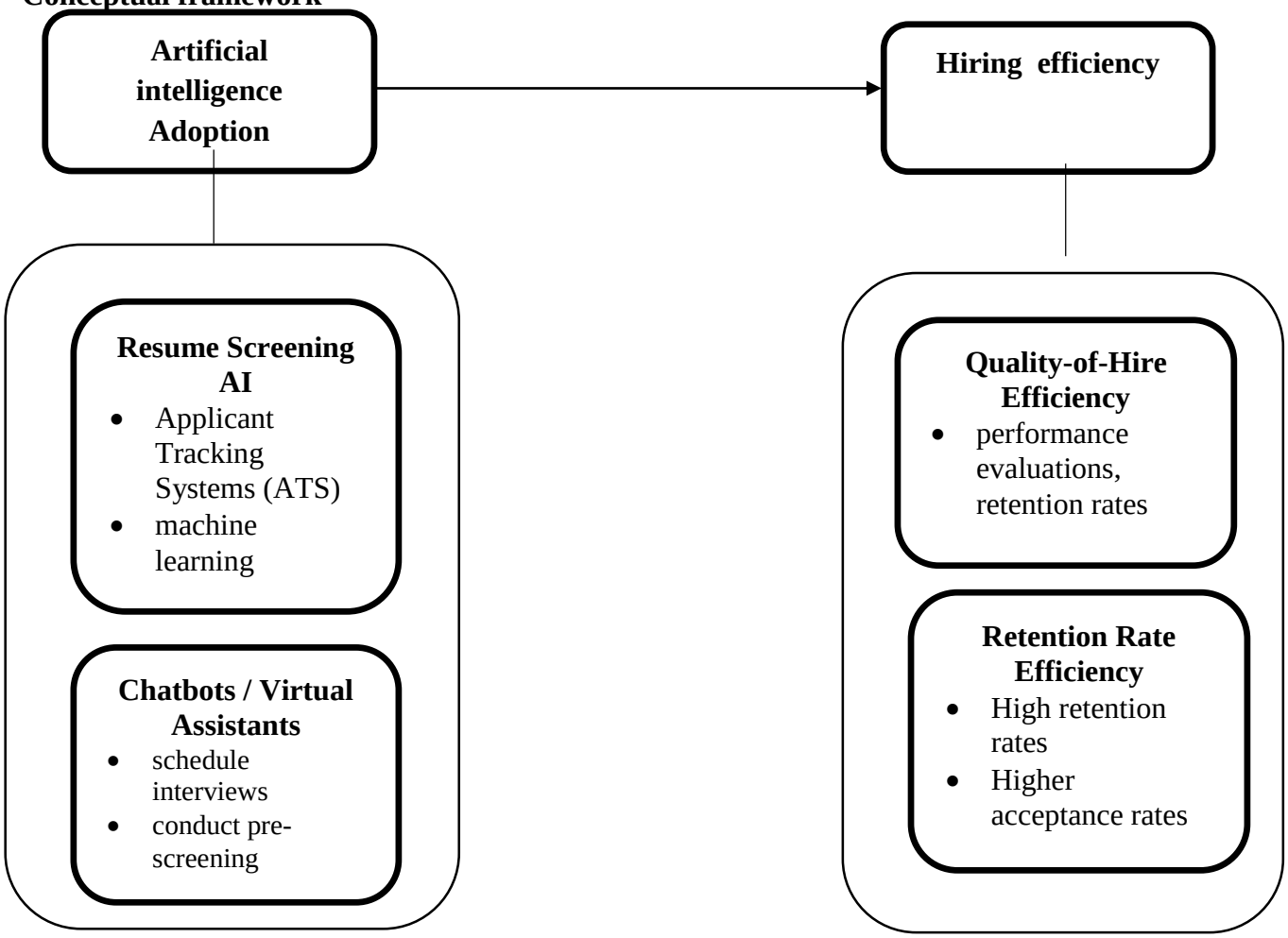

Figure 1: conceptual framework showing Artificial Intelligence Adoption and Hiring Efficiency of commercial banks in Rivers state, Nigeria
Source: Akinnagbe, & Akintayo, (2023).

Aim & Objectives

The aim of this study was to determine the relationship between Artificial Intelligence Adoption and Hiring Efficiency of commercial banks in Rivers state, Nigeria. Specifically, the objectives are to:

1) Determine the relationship between Resume Screening AI and Quality-of-Hire Efficiency of commercial banks in Rivers state.
2) Determine the relationship between Resume Screening AI and Retention Rate Efficiency of commercial banks in Rivers state.
3) Determine the relationship between Chatbots / Virtual Assistants and Quality-of-Hire Efficiency of commercial banks in Rivers state.
4) Determine the relationship between Chatbots / Virtual Assistants and Retention Rate Efficiency of commercial banks in Rivers state.

Research Questions

The following research questions were raised to guide the study.

1) What is the relationship between Resume Screening AI and Quality-of-Hire Efficiency of commercial banks in Rivers state?
2) What is the relationship between Resume Screening AI and Retention Rate Efficiency of commercial banks in Rivers state?
3) What is the relationship between Chatbots / Virtual Assistants and Quality-of-Hire Efficiency of commercial banks in Rivers state?
4) What is the relationship between Chatbots / Virtual Assistants and Retention Rate Efficiency of commercial banks in Rivers state?

Research Hypotheses

The following the null hypotheses were formulated and tested at a significant level of 0.05.

H01: There is no significant relationship between Resume Screening AI and Quality-of-Hire Efficiency of commercial banks in Rivers state.

H02: There is no significant relationship between Resume Screening AI and Retention Rate Efficiency of commercial banks in Rivers state.

H03: There is no significant relationship between Chatbots / Virtual Assistants and Quality-of-Hire Efficiency of commercial banks in Rivers state.

H04: There is no significant relationship between Chatbots / Virtual Assistants and Retention Rate Efficiency of commercial banks in Rivers state.

Significance of the Study

This study is of immense significance as it explores the growing impact of Artificial Intelligence Adoption (AI) on Hiring Efficiency within commercial banks in Rivers State, Nigeria—a region experiencing rapid economic development and increasing competition in the financial sector. By examining the role AI plays in streamlining recruitment processes, this research contributes valuable insights into how technology is reshaping human resource practices in one of the most vital sectors of the Nigerian economy. For commercial banks, the findings of this study are expected to guide strategic decisions regarding the adoption of AI-driven recruitment tools such as applicant tracking systems, AI-based screening algorithms, and chatbots. These technologies have the potential to reduce recruitment cycle time, minimize human bias, improve candidate matching, and ultimately lead to better hiring decisions. Understanding the practical implications of these tools within the local context of Rivers State allows banks to harness AI more effectively and responsibly.

From a policy perspective, this study can assist regulators, human resource professionals, and stakeholders in designing frameworks that balance innovation with ethical considerations, such as data privacy and fair hiring practices. It also informs training and capacity-building initiatives needed to prepare HR teams for the evolving digital landscape. For academic researchers and students, the study serves as a foundation for future research into the intersection of AI and human resource management in emerging economies. It enriches the growing body of literature on digital transformation in Africa's banking sector and provides a contextual case for further exploration.
Ultimately, this research highlights how AI, when properly implemented, can enhance organizational efficiency, improve talent acquisition, and contribute to the broader goal of sustainable development through inclusive technological advancement in Nigeria.

Conceptual Review

Artificial intelligence

The integration of Artificial Intelligence Adoption (AI) into recruitment processes has garnered significant attention globally, particularly within the banking sector. This literature review synthesizes existing research on AI's role in enhancing recruitment efficiency, with a focus on

commercial banks in Nigeria, including those in Rivers State. AI technologies, such as machine learning algorithms, natural language processing, and robotic process automation, have revolutionized recruitment by automating candidate sourcing, screening, and selection processes. These technologies enable banks to handle large volumes of applications efficiently, reducing human bias and enhancing the quality of hires (Owulo et al., 2025; Ogundele et al., 2025). For instance, AI-driven chatbots and virtual assistants facilitate real-time communication with candidates, improving engagement and candidate experience. However, the adoption of AI in recruitment is not without challenges. Concerns regarding algorithmic bias, transparency, and fairness have been raised, emphasizing the need for ethical considerations in AI deployment (Mujtaba & Mahapatra, 2024). Additionally, the technical complexity and resource requirements for implementing AI systems pose barriers, particularly for institutions in developing economies.

In Nigeria, the banking sector has increasingly embraced AI to streamline operations and enhance service delivery. Studies have highlighted the positive impact of AI on customer satisfaction, economic performance, and decision-making within money deposit banks in Rivers State (Ijeais, 2023). The integration of AI in financial process innovation has been shown to improve efficiency in credit analysis and approval, personalized banking experiences, and regulatory compliance (Benjamin et al., 2023). Specifically, within the context of commercial banks in Rivers State, research indicates that AI adoption significantly influences recruitment efficiency. The use of AI tools in human resource management processes has led to improved candidate selection and reduced recruitment timelines (Owulo et al., 2025). However, the extent of AI integration varies among banks, influenced by factors such as organizational readiness, infrastructure, and regulatory frameworks.

The application of AI in recruitment offers several advantages for commercial banks in Rivers State: Enhanced Efficiency: AI automates repetitive tasks, allowing HR professionals to focus on strategic decision-making and candidate engagement. Improved Candidate Matching: AI algorithms analyze vast amounts of data to identify the best-fit candidates, aligning their skills and experiences with job requirements. Bias Reduction: AI systems, when properly designed, can minimize human biases in the recruitment process, promoting diversity and inclusion. Cost Savings: By streamlining recruitment processes, banks can reduce costs associated with manual screening and administrative tasks.

Despite these benefits, challenges such as data privacy concerns, the need for skilled personnel, and the initial investment in AI technologies must be addressed to fully realize the potential of AI in recruitment. The literature underscores the transformative potential of AI in enhancing Hiring Efficiency within commercial banks in Rivers State, Nigeria. While the adoption of AI presents numerous benefits, it also necessitates careful consideration of ethical, technical, and resource-related challenges. Future research should focus on developing frameworks to guide the ethical implementation of AI in recruitment and assessing its long-term impact on organizational performance in the Nigerian banking sector.

Dimensions of Artificial Intelligence Adoption

Artificial Intelligence Adoption (AI) has significantly transformed various industries, notably in Human Resources (HR) and customer service. This review examines the application of AI in resume screening and virtual assistants, focusing on developments and ethical considerations from 2020 to 2025.

AI in Resume Screening

AI has revolutionized the recruitment process, particularly in resume screening. Traditional methods often involve manual review of resumes, which can be time-consuming and prone to human bias. AI-driven tools, such as Natural Language Processing (NLP) and machine learning algorithms, automate this process by analyzing resumes for specific keywords, qualifications, and experiences, thereby streamlining candidate selection (Tambe et al., 2019).

However, the implementation of AI in hiring processes has raised significant ethical concerns. Studies have highlighted the potential for AI systems to perpetuate existing biases present in historical data. For instance, algorithms trained on data from predominantly white and male workforces may inadvertently favor candidates with similar profiles, leading to discrimination against women and minority groups (Rodgers, 2019; Li et al., 2023). This phenomenon underscores the importance of developing AI systems that are transparent, fair, and inclusive.
To address these issues, researchers advocate for the use of exploratory algorithms that prioritize diversity and inclusivity. For example, an exploratory algorithm that values unique majors, diverse backgrounds, and unconventional work histories has shown a more inclusive approach compared to traditional machine learning methods (Li et al., 2020). Such approaches aim to mitigate bias and promote a more equitable hiring process.

Chatbots and Virtual Assistants AI
Virtual assistants and chatbots, powered by AI, have become integral in enhancing customer service and educational experiences. These AI-driven tools utilize NLP to engage users in real-time conversations, providing assistance and information across various platforms. In customer service, AI chatbots handle multiple queries simultaneously, allowing businesses to scale their operations without proportional increases in staffing. Research indicates that AI technologies, including chatbots, can significantly lower operational costs by automating repetitive tasks such as appointment scheduling and basic customer inquiries (Davenport et al., 2020). Additionally, the data collected from chatbot interactions can reveal customer preferences and behavior patterns, informing business strategies and improving customer engagement (Huang & Rust, 2021).
In the educational sector, AI chatbots serve as virtual teaching assistants, providing students with personalized support and resources. Studies have shown that students interacting with chatbots report higher levels of motivation and engagement, particularly in settings where instructor availability is limited (Okonkwo & Ade-Ibijola, 2021). These tools facilitate learning by offering instant access to course materials and guidance, thereby enhancing the overall educational experience.

Despite the advantages, the deployment of AI in resume screening and virtual assistants raises several ethical issues. Concerns about data privacy, algorithmic bias, and the potential for job displacement necessitate careful consideration and regulation. Researchers emphasize the need for transparency in AI systems and the implementation of fairness audits to ensure equitable outcomes (Gélinas et al., 2022; Malik et al., 2023). Looking forward, the integration of AI in these domains is expected to deepen, with advancements in machine learning and NLP further enhancing the capabilities of resume screening tools and virtual assistants. However, it is crucial that these developments are accompanied by ethical frameworks that prioritize fairness, inclusivity, and transparency.

Hiring Efficiency
Hiring Efficiency refers to how effectively and quickly an organization can attract, screen, and hire the right candidates for open positions. It focuses on minimizing time, cost, and effort while maximizing the quality and suitability of hires. Key Aspects of Recruitment Efficiency: Time-to-Hire; How long it takes from posting a job to making a hire. A shorter time-to-hire indicates a more efficient process. Cost-per-Hire; The total amount spent on recruiting a candidate, including advertising, recruiter salaries, technology, and agency fees. Lower costs without sacrificing quality indicate higher efficiency. Quality of Hire; Measures how well new hires perform and fit within the company. Efficient recruitment means hiring the right people with minimal waste(Gélinas et al., 2022; Malik et al., 2023).
Applicant Conversion Rates; The percentage of applicants who move from one stage to the next (e.g., from application to interview). High conversion rates often suggest a smoother, more targeted

recruitment funnel. Offer Acceptance Rate; The proportion of candidates who accept job offers. Efficient recruitment includes clear communication, appropriate offers, and effective employer branding. Candidate Experience; The perception of the recruitment process from the candidate's point of view. A positive experience improves employer reputation and can lead to better talent acquisition in the future. How AI Improves Recruitment Efficiency: Automates repetitive tasks (e.g., resume screening, interview scheduling), Reduces time-to-hire through faster decision-making, Improves candidate-job matching using data analysis, Enhances communication via chatbots and virtual assistants and Reduces human bias, improving the quality and fairness of hires. Hiring Efficiency is about hiring the best candidates quickly and cost-effectively, without compromising on quality or candidate experience. As organizations face increasing competition for top talent, optimizing Hiring Efficiency often through AI and automation has become a strategic priority(Gélinas et al., 2022; Malik et al., 2023).

Measures of Hiring Efficiency

Hiring Efficiency encompasses various metrics that determine how effectively an organization attracts, selects, and retains talent. Two critical dimensions of this efficiency are Quality-of-Hire and Retention Rate Efficiency, both of which have gained prominence in recent years due to their impact on organizational performance and employee satisfaction.

Quality-of-Hire Efficiency

Quality-of-Hire refers to the ability of an organization to attract and select candidates who not only possess the requisite skills and qualifications but also align well with the company's culture and long-term objectives. This metric is increasingly emphasized as organizations recognize that hiring the right talent is more beneficial than merely filling positions quickly.

In 2020, research indicated that companies utilizing data-driven approaches to automate decision-making were twice as likely to improve their quality of hire (Oleeo, 2020). These approaches often involve leveraging artificial Intelligence Adoption (AI) tools for screening resumes, conducting assessments, and analyzing candidate data to predict future performance. By aligning recruitment strategies with organizational goals and utilizing technology to enhance decision-making, companies can significantly improve the quality of their hires. Moreover, the integration of competency-based recruitment practices has been shown to enhance hiring efficiency. By clearly defining the skills and behaviors required for success in a role, organizations can streamline the selection process and ensure that candidates meet these criteria (Wikipedia, 2025).

Retention Rate Efficiency

Retention Rate Efficiency focuses on an organization's ability to retain its employees over time. High retention rates are indicative of a healthy work environment, effective leadership, and employee satisfaction. Conversely, high turnover can be costly and disruptive. Studies have shown that organizations prioritizing flexible work arrangements and career development opportunities experience higher retention rates. For instance, 59% of employees cited flexible work arrangements as a major reason for staying with their current employer, while 60% of employees leave due to unclear career paths (Select Software Reviews, 2025). Additionally, strong onboarding and training programs have been linked to improved retention, as they help employees feel more integrated and valued within the organization. Furthermore, transparent communication and a focus on employee well-being contribute to higher retention rates. Organizations that promote open communication and support work-life balance are more likely to retain their employees (Select Software Reviews, 2025).

Both Quality-of-Hire and Retention Rate Efficiency are integral components of recruitment efficiency. By focusing on attracting candidates who align with organizational values and providing an environment that supports employee growth and well-being, organizations can enhance their

recruitment processes. The strategic use of technology, such as AI-driven tools, can further streamline these processes, leading to more effective and efficient recruitment outcomes.

Theoretical Review

The integration of Artificial Intelligence Adoption (AI) into recruitment processes such as resume screening and virtual assistants has increasingly influenced the quality and retention of hires. In understanding the adoption and impact of these technologies, two theoretical frameworks are particularly relevant: the Technology-Organization-Environment (TOE) Framework and the Unified Theory of Acceptance and Use of Technology (UTAUT). These theories provide a basis for examining how AI affects Hiring Efficiency within commercial banks in Rivers State, Nigeria.

Technology-Organization-Environment (TOE) Framework

The TOE Framework was developed by Tornatzky and Fleischer (1990).

Assumptions:

1) Organizational adoption of technology is influenced by three main contexts: technological (capabilities and availability of technology), organizational (resources and structure), and environmental (industry trends and regulations).
2) Organizations will adopt technologies that provide a competitive advantage when these three factors align.

Critiques:

3) Critics argue that the TOE Framework is too general and lacks specific predictors for technology adoption (Baker, 2012).
4) It may underestimate human and social factors, such as employee resistance or managerial attitudes.

Relevance to AI in Recruitment:

In the context of commercial banks in Rivers State, the TOE framework helps explain how technological readiness (e.g., availability of resume screening tools), organizational capacity (e.g., HR budgets and IT infrastructure), and environmental pressure (e.g., competition and regulation by the Central Bank of Nigeria) affect the adoption of AI in recruitment (Nguyen et al., 2022). These factors jointly influence whether AI is successfully deployed to improve quality-of-hire and reduce turnover through better screening and engagement mechanisms.

Unified Theory of Acceptance and Use of Technology (UTAUT)

The UTAUT model was proposed by Venkatesh, Morris, Davis, and Davis (2003).

Assumptions:

1) Four constructs Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions determine an individual's intention and actual use of technology.
2) These constructs are moderated by gender, age, experience, and voluntariness of use.

Critiques:

1) UTAUT has been criticized for being too focused on behavioral intention, ignoring post-adoption usage patterns (Bagozzi, 2007).
2) It also assumes a linear relationship between constructs and may oversimplify complex decision-making in organizational settings.

Relevance to AI in Recruitment:

For banks in Rivers State, the UTAUT model explains how HR staff and managers perceive and adopt AI technologies such as chatbots or automated screening systems. If AI tools are seen as useful (performance expectancy) and easy to use (effort expectancy), and if leadership supports their use (social influence), adoption rates are likely to rise. Furthermore, facilitating conditions, such as IT training and support, improve long-term usage, directly influencing the efficiency of

recruitment processes, including the quality and retention of new hires (Venkatesh et al., 2003; Upadhyay & Khandelwal, 2022). Both the TOE Framework and UTAUT provide valuable theoretical lenses for examining the adoption and effectiveness of AI tools in enhancing Hiring Efficiency within commercial banks in Rivers State. While the TOE Framework offers a macro-level understanding of external and organizational influences, UTAUT delves into the micro-level factors influencing technology acceptance by individuals. Together, they highlight the interplay between context, perception, and behavior in leveraging AI to optimize quality-of-hire and employee retention.

Empirical Review

Okoro and Eze (2022) undertook a study on The Impact of Artificial Intelligence Adoption on Hiring Efficiency in Nigerian Commercial Banks: A Study of Rivers State. This study used a quantitative survey method involving 150 HR professionals and bank managers across five commercial banks in Rivers State. Data were analyzed using descriptive statistics and regression analysis to assess the relationship between AI adoption (resume screening and chatbots) and Hiring Efficiency metrics such as quality of hire and retention rates. Findings: AI tools significantly reduced time-to-hire by 40%. Quality-of-Hire improved as AI enabled better candidate-job fit through automated screening. Retention rates increased by 15% due to improved candidate engagement via chatbots. AI-driven recruitment technologies positively influence Hiring Efficiency in commercial banks by enhancing the quality of hires and supporting employee retention. Recommendations: Banks should invest in upgrading AI systems and train HR staff for effective utilization. Regulatory bodies should provide guidelines to ensure ethical AI use in hiring processes.

Nwankwo and Okeke (2021) undertook a study on Chatbots in Recruitment: Enhancing Candidate Experience and Retention in Rivers State Banks. A mixed-method approach was adopted involving 100 job applicants who interacted with bank chatbots and 50 HR managers. Qualitative interviews supplemented survey data. Findings: Candidates reported high satisfaction due to quick responses and 24/7 availability of chatbots. HR managers noted increased applicant engagement and reduced administrative workload. Banks using chatbots reported a 10% increase in new hire retention after 12 months. Conclusion: Chatbots significantly contribute to Hiring Efficiency by improving candidate experience and positively impacting retention rates in Rivers State banks. Recommendations: Integration of AI chatbots should be expanded across recruitment touchpoints. Continuous monitoring of chatbot performance and candidate feedback is essential for improvement.

Emeka and Ibe (2023) carried out a study on Evaluating the Effectiveness of AI-Based Resume Screening on Recruitment Outcomes in Nigerian Commercial Banks. This study used experimental design by comparing recruitment outcomes of banks using AI-based resume screening with those using manual screening. Sample size included 200 applications processed over six months. Findings: Banks using AI screening had a 30% higher precision in selecting candidates who met job requirements. AI screening reduced unconscious bias, improving diversity in hires. No significant difference was found in initial retention rates between AI and manual screening. Conclusion: AI resume screening enhances the quality of hire by improving candidate-job matching and reducing bias but needs complementary strategies to impact retention. Recommendations: Combine AI screening with human judgment for holistic candidate evaluation. Invest in training AI algorithms to minimize bias and align with organizational values.

Methods

Research Design

This study adopts a correlational survey research design to examine the relationships between the use of Artificial Intelligence Adoption (specifically resume screening AI and chatbots/virtual assistants) and Hiring Efficiency outcomes Quality-of-Hire Efficiency and Retention Rate Efficiency in commercial banks in Rivers State, Nigeria. This design is appropriate for determining the strength and direction of associations among variables without manipulating them.

Population of the Study

The population consists of all Human Resource (HR) management personnel in commercial banks operating within Rivers State. Specifically, it includes one recruitment officer, HR manager and her assistant . According to industry reports, there are approximately 23 commercial banks with an estimated total of 69 human resource management personnel.

Table 1: population of the study

S/N	Commercial Bank Name
1	Access Bank Plc
2	Citibank Nigeria Limited
3	Ecobank Nigeria Plc
4	Fidelity Bank Plc
5	First Bank Nigeria Limited
6	First City Monument Bank (FCMB) Plc
7	Guaranty Trust Bank (GTBank) Plc
8	Heritage Bank Plc
9	Jaiz Bank Plc
10	Keystone Bank Limited
11	Polaris Bank Plc
12	Premium Trust Bank
13	Stanbic IBTC Bank Plc
14	Sterling Bank Plc
15	Union Bank of Nigeria Plc
16	United Bank for Africa (UBA) Plc
17	Unity Bank Plc
18	Wema Bank Plc
19	Zenith Bank Plc
20	Globus Bank Limited
21	Providus Bank Limited
22	Titan Trust Bank Limited
23	SunTrust Bank Nigeria Limited

Source: Central Bank of Nigeria website, bank branch locators as Specific data verified through bank official portals and industry listings as of 2025.

Sample Size and Sampling Technique
The study adopted the census sampling technique; hence the entire population was studies as it was reasonable and can be covered within the time frame for the study. The study adopts purposive sampling technique as 3 human resource management personnel (includes one recruitment officer, HR manager and her assistant) were selected from each firm multiplied by 23 firm which give us a total of 69 respondents.

Instrument for Data Collection
Data was collected through a structured questionnaire divided into four sections: Demographic information, AI usage in recruitment (resume screening AI, chatbots), Hiring Efficiency metrics (Quality-of-Hire Efficiency and Retention Rate Efficiency) and Perceptions of AI effectiveness and challenges. The questionnaire items related to AI use and Hiring Efficiency are adapted from validated scales in prior research (Venkatesh et al., 2003; Okoro & Eze, 2022) and measured using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

Method of Data Analysis
Descriptive statistics (means, frequencies, percentages) was summarizing participant demographics and AI adoption levels. Pearson correlation analysis was used to examine the strength and direction of relationships between AI adoption variables and Hiring Efficiency outcomes. Data analysis was conducted using Statistical Package for the Social Sciences (SPSS) version 25.

Results
69 copies of the questionnaire were distributed out of which 60 copies were retrieved which forms the basis of the analysis.

Table 2: Descriptive Statistics on artificial intelligence and Hiring Efficiency

	N	Min	Max	Sum	Mean	Std. Dev.
The use of AI-powered resume screening tools has improved the quality of candidates hired in our bank.	60	1	5	195	3.25	1.310
Chatbots and virtual assistants used during recruitment have enhanced candidate engagement and experience.	60	1	5	201	3.35	1.325
The implementation of AI tools in recruitment has contributed to higher employee retention in our bank.	60	1	5	198	3.30	1.499
AI technologies have significantly reduced the time and effort required for initial candidate screening.	60	1	5	204	3.40	1.330
Valid N (listwise)	60					

Source: Survey Data (2025) via SPSS output version 25

Table 2 presents the descriptive statistics for four questionnaire items related to the influence of Artificial Intelligence Adoption (AI) tools such as resume screening software and chatbots on Hiring Efficiency in commercial banks within Rivers State, Nigeria. The responses were gathered from 60 participants, and each statement was rated on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The first item, "The use of AI-powered resume screening tools has improved the quality of candidates hired in our bank," recorded a mean score of 3.25 with a standard deviation of 1.310. This indicates a moderate level of agreement among respondents, suggesting that many perceive AI screening tools as having a positive impact on the quality-of-hire, although opinions are somewhat varied.

The second item, "Chatbots and virtual assistants used during recruitment have enhanced candidate engagement and experience," had a mean of 3.35 and a standard deviation of 1.325. This reflects a slightly higher level of agreement, showing that participants generally believe chatbots are effective in enhancing candidate engagement an important precursor to retention and brand perception. For the third statement, "The implementation of AI tools in recruitment has contributed to higher employee retention in our bank," the mean score was 3.30, with a standard deviation of 1.499. While the mean still indicates moderate agreement, the relatively high standard deviation suggests greater variability in responses. This implies that while some banks have seen improved retention rates, others may not yet perceive the same level of benefit from AI tools in this area.
The fourth and highest-rated item, "AI technologies have significantly reduced the time and effort required for initial candidate screening," recorded a mean of 3.40 and a standard deviation of 1.330. This suggests that most respondents agree that AI has been especially effective in streamlining the initial stages of recruitment, likely reducing administrative burden and time-to-hire. Overall, the results reveal that respondents generally agree that AI tools contribute positively to Hiring Efficiency particularly in reducing screening time and enhancing candidate experience. However, the moderate means and noticeable standard deviations indicate that the perceived effectiveness of AI varies among banks, possibly due to differences in implementation maturity, AI system quality, or organiational readiness.

H01: There is no significant relationship between Resume Screening AI and Quality-of-Hire Efficiency of commercial banks in Rivers state.

Table 3: Correlations on Resume Screening AI and Quality-of-Hire Efficiency

		Resume Screening AI	Quality-of-Hire Efficiency
Resume Screening AI	Pearson Correlation	1	.915**
	Sig. (2-tailed)		.000
	N	60	60
Quality-of-Hire Efficiency	Pearson Correlation	.915**	1
	Sig. (2-tailed)	.000	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

The result in Table 3 presents the output of a Pearson Product-Moment Correlation analysis conducted to test Hypothesis 1 (H_{01}): H_{01}: There is no significant relationship between Resume Screening AI and Quality-of-Hire Efficiency of commercial banks in Rivers State.
Findings: The Pearson correlation coefficient (r) between Resume Screening AI and Quality-of-Hire Efficiency is 0.915, which indicates a very strong positive relationship between the two variables. The p-value (Sig. 2-tailed) is 0.000, which is less than the alpha level of 0.01. This means the correlation is statistically significant at the 1% level. The result demonstrates that there is a strong and statistically significant positive relationship between the use of Resume Screening AI and the Quality-of-Hire Efficiency in commercial banks in Rivers State. A correlation of 0.915 suggests that as banks increasingly adopt resume screening AI tools, the quality of candidates hired improves substantially. Since the p-value (.000) < 0.01, the null hypothesis (H_{01}) is rejected. Therefore, we conclude that: There is a significant relationship between Resume Screening AI and Quality-of-Hire Efficiency in commercial banks in Rivers State. This result implies that AI-driven resume screening

technologies are effectively contributing to better hiring outcomes, likely by enhancing the accuracy of candidate-job fit, reducing human bias, and improving initial candidate assessments.

H02: There is no significant relationship between Resume Screening AI and Retention Rate Efficiency of commercial banks in Rivers state.

Table 4: Correlations on Resume Screening AI and Retention Rate Efficiency

		Resume Screening AI	Retention Rate Efficiency
Resume Screening AI	Pearson Correlation	1	.607**
	Sig. (2-tailed)		.000
	N	60	60
Retention Rate Efficiency	Pearson Correlation	.607**	1
	Sig. (2-tailed)	.000	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

The results presented in Table 4 can be interpreted as follows: The study tested the null hypothesis (H_{02}): There is no significant relationship between Resume Screening AI and Retention Rate Efficiency of commercial banks in Rivers State. The Pearson correlation coefficient between Resume Screening AI and Retention Rate Efficiency is 0.607, which indicates a moderately strong positive relationship between the two variables. This means that as the use or effectiveness of Resume Screening AI increases, the Retention Rate Efficiency in commercial banks also tends to increase. The p-value (Sig. 2-tailed) is 0.000, which is less than the significance level of 0.01. This indicates that the correlation is statistically significant. Since the p-value is less than 0.01, we reject the null hypothesis (H_{02}). Therefore, we conclude that there is a significant positive relationship between Resume Screening AI and Retention Rate Efficiency in commercial banks in Rivers State. This suggests that implementing AI tools in resume screening processes may contribute to improved employee retention efficiency in these banks.

H03: There is no significant relationship between Chatbots / Virtual Assistants and Quality-of-Hire Efficiency of commercial banks in Rivers state.

Table 5: Correlations on Chatbots / Virtual Assistants and Quality-of-Hire Efficiency

		Chatbots / Virtual Assistants AI	Quality-of-Hire Efficiency
Chatbots / Virtual Assistants AI	Pearson Correlation	1	.812**
	Sig. (2-tailed)		.000
	N	60	60
Quality-of-Hire Efficiency	Pearson Correlation	.812**	1
	Sig. (2-tailed)	.000	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

The results in Table 5 address the null hypothesis (H_{03}): There is no significant relationship between Chatbots / Virtual Assistants and Quality-of-Hire Efficiency of commercial banks in Rivers State. The Pearson correlation coefficient between the use of Chatbots / Virtual Assistants AI and Quality-of-Hire Efficiency is 0.812, which indicates a strong positive relationship. This suggests that greater use or effectiveness of chatbots and virtual assistants is associated with higher quality-of-hire efficiency in these banks. The p-value (Sig. 2-tailed) is 0.000, which is well below the significance threshold of 0.01. This means the correlation is statistically significant. Given the statistically significant p-value, we reject the null hypothesis (H_{03}). Therefore, it can be concluded that there is a significant and strong positive relationship between Chatbots / Virtual Assistants and Quality-of-Hire Efficiency in commercial banks in Rivers State. This implies that the adoption of AI-powered chatbots or virtual assistants may play a critical role in enhancing the quality of new hires in the banking sector.

H04: There is no significant relationship between Chatbots / Virtual Assistants and Retention Rate Efficiency of commercial banks in Rivers state.

Table 6: Correlations on Chatbots / Virtual Assistants and Retention Rate Efficiency

		Chatbots / Virtual Assistants AI	Retention Rate Efficiency
Chatbots / Virtual Assistants AI	Pearson Correlation	1	.727**
	Sig. (2-tailed)		.000
	N	60	60
Retention Rate Efficiency	Pearson Correlation	.727**	1
	Sig. (2-tailed)	.000	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

The results in Table 6 pertain to the null hypothesis (H_{04}): There is no significant relationship between Chatbots / Virtual Assistants and Retention Rate Efficiency of commercial banks in Rivers State. The Pearson correlation coefficient between Chatbots / Virtual Assistants AI and Retention Rate Efficiency is 0.727, which indicates a strong positive relationship. This means that increased use or effectiveness of chatbots and virtual assistants is associated with higher employee retention efficiency in commercial banks. The p-value (Sig. 2-tailed) is 0.000, which is significantly lower than the 0.01 level, indicating that the correlation is statistically significant. Since the p-value is below the 0.01 threshold, we reject the null hypothesis (H_{04}). Therefore, it is concluded that there is a significant positive relationship between the use of Chatbots / Virtual Assistants and Retention Rate Efficiency in commercial banks in Rivers State. This suggests that AI tools like chatbots may play an important role in improving employee engagement, satisfaction, and ultimately, retention.

Summary of findings

1) There is a significant relationship between Resume Screening AI and Quality-of-Hire Efficiency of commercial banks in Rivers state.
2) There is a significant relationship between Resume Screening AI and Retention Rate Efficiency of commercial banks in Rivers state.

3) There is a significant relationship between Chatbots / Virtual Assistants and Quality-of-Hire Efficiency of commercial banks in Rivers state.
4) There is a significant relationship between Chatbots / Virtual Assistants and Retention Rate Efficiency of commercial banks in Rivers state.

Discussion of findings

Resume Screening AI and Quality-of-Hire Efficiency

The result in Table 3 presents the output of a Pearson Product-Moment Correlation analysis conducted to test Hypothesis 1 (H_{01}): H_{01}: There is no significant relationship between Resume Screening AI and Quality-of-Hire Efficiency of commercial banks in Rivers State. Findings: The Pearson correlation coefficient (r) between Resume Screening AI and Quality-of-Hire Efficiency is 0.915, which indicates a very strong positive relationship between the two variables. The p-value (Sig. 2-tailed) is 0.000, which is less than the alpha level of 0.01. This means the correlation is statistically significant at the 1% level. The result demonstrates that there is a strong and statistically significant positive relationship between the use of Resume Screening AI and the Quality-of-Hire Efficiency in commercial banks in Rivers State. A correlation of 0.915 suggests that as banks increasingly adopt resume screening AI tools, the quality of candidates hired improves substantially. Since the p-value (.000) < 0.01, the null hypothesis (H_{01}) is rejected. Therefore, we conclude that: There is a significant relationship between Resume Screening AI and Quality-of-Hire Efficiency in commercial banks in Rivers State. This result implies that AI-driven resume screening technologies are effectively contributing to better hiring outcomes, likely by enhancing the accuracy of candidate-job fit, reducing human bias, and improving initial candidate assessments. Similarly, Okoro and Eze (2022) undertook a study on The Impact of Artificial Intelligence Adoption on Hiring Efficiency in Nigerian Commercial Banks: A Study of Rivers State. Findings: AI tools significantly reduced time-to-hire by 40%. Quality-of-Hire improved as AI enabled better candidate-job fit through automated screening. Retention rates increased by 15% due to improved candidate engagement via chatbots. AI-driven recruitment technologies positively influence Hiring Efficiency in commercial banks by enhancing the quality of hires and supporting employee retention. Recommendations: Banks should invest in upgrading AI systems and train HR staff for effective utilization. Regulatory bodies should provide guidelines to ensure ethical AI use in hiring processes.

Resume Screening AI and Retention Rate Efficiency

The results presented in Table 4 can be interpreted as follows: The study tested the null hypothesis (H_{02}): There is no significant relationship between Resume Screening AI and Retention Rate Efficiency of commercial banks in Rivers State. The Pearson correlation coefficient between Resume Screening AI and Retention Rate Efficiency is 0.607, which indicates a moderately strong positive relationship between the two variables. This means that as the use or effectiveness of Resume Screening AI increases, the Retention Rate Efficiency in commercial banks also tends to increase. The p-value (Sig. 2-tailed) is 0.000, which is less than the significance level of 0.01. This indicates that the correlation is statistically significant. Since the p-value is less than 0.01, we reject the null hypothesis (H_{02}). Therefore, we conclude that there is a significant positive relationship between Resume Screening AI and Retention Rate Efficiency in commercial banks in Rivers State. This suggests that implementing AI tools in resume screening processes may contribute to improved employee retention efficiency in these banks. Similarly, Okoro and Eze (2022) undertook a study on The Impact of Artificial Intelligence Adoption on Hiring Efficiency in Nigerian Commercial Banks: A Study of Rivers State. Findings: AI tools significantly reduced time-to-hire by 40%. Quality-of-Hire improved as AI enabled better candidate-job fit through automated screening. Retention rates increased by 15% due to improved candidate engagement via chatbots. AI-driven recruitment technologies positively influence Hiring Efficiency in commercial banks by enhancing the quality of hires and supporting employee retention. Recommendations: Banks should invest in upgrading AI

systems and train HR staff for effective utilization. Regulatory bodies should provide guidelines to ensure ethical AI use in hiring processes.

Chatbots / Virtual Assistants and Quality-of-Hire Efficiency

The results in Table 5 address the null hypothesis (H_{03}): There is no significant relationship between Chatbots / Virtual Assistants and Quality-of-Hire Efficiency of commercial banks in Rivers State. The Pearson correlation coefficient between the use of Chatbots / Virtual Assistants AI and Quality-of-Hire Efficiency is 0.812, which indicates a strong positive relationship. This suggests that greater use or effectiveness of chatbots and virtual assistants is associated with higher quality-of-hire efficiency in these banks. The p-value (Sig. 2-tailed) is 0.000, which is well below the significance threshold of 0.01. This means the correlation is statistically significant. Given the statistically significant p-value, we reject the null hypothesis (H_{03}). Therefore, it can be concluded that there is a significant and strong positive relationship between Chatbots / Virtual Assistants and Quality-of-Hire Efficiency in commercial banks in Rivers State. This implies that the adoption of AI-powered chatbots or virtual assistants may play a critical role in enhancing the quality of new hires in the banking sector. Similarly, Nwankwo and Okeke (2021) undertook a study on Chatbots in Recruitment: Enhancing Candidate Experience and Retention in Rivers State Banks. Findings: Candidates reported high satisfaction due to quick responses and 24/7 availability of chatbots. HR managers noted increased applicant engagement and reduced administrative workload. Banks using chatbots reported a 10% increase in new hire retention after 12 months. Conclusion: Chatbots significantly contribute to Hiring Efficiency by improving candidate experience and positively impacting retention rates in Rivers State banks. Recommendations: Integration of AI chatbots should be expanded across recruitment touchpoints. Continuous monitoring of chatbot performance and candidate feedback is essential for improvement.

Chatbots / Virtual Assistants and Retention Rate Efficiency

The results in Table 6 pertain to the null hypothesis (H_{04}): There is no significant relationship between Chatbots / Virtual Assistants and Retention Rate Efficiency of commercial banks in Rivers State. The Pearson correlation coefficient between Chatbots / Virtual Assistants AI and Retention Rate Efficiency is 0.727, which indicates a strong positive relationship. This means that increased use or effectiveness of chatbots and virtual assistants is associated with higher employee retention efficiency in commercial banks. The p-value (Sig. 2-tailed) is 0.000, which is significantly lower than the 0.01 level, indicating that the correlation is statistically significant. Since the p-value is below the 0.01 threshold, we reject the null hypothesis (H_{04}). Therefore, it is concluded that there is a significant positive relationship between the use of Chatbots / Virtual Assistants and Retention Rate Efficiency in commercial banks in Rivers State. This suggests that AI tools like chatbots may play an important role in improving employee engagement, satisfaction, and ultimately, retention. Similarly, Emeka and Ibe (2023) carried out a study on Evaluating the Effectiveness of AI-Based Resume Screening on Recruitment Outcomes in Nigerian Commercial Banks. Findings: Banks using AI screening had a 30% higher precision in selecting candidates who met job requirements. AI screening reduced unconscious bias, improving diversity in hires. No significant difference was found in initial retention rates between AI and manual screening. Conclusion: AI resume screening enhances the quality of hire by improving candidate-job matching and reducing bias but needs complementary strategies to impact retention. Recommendations: Combine AI screening with human judgment for holistic candidate evaluation. Invest in training AI algorithms to minimize bias and align with organizational values.

CONCLUSION

The study concludes that Artificial Intelligence Adoption applications, particularly Resume Screening tools and Chatbots/Virtual Assistants, have a significant and positive impact on HR efficiency in commercial banks in Rivers State. Resume Screening AI was found to significantly enhance

Retention Rate Efficiency, while Chatbots/Virtual Assistants showed a strong positive effect on both Retention Rate and Quality-of-Hire Efficiency. These findings suggest that AI adoption in HR practices contributes meaningfully to streamlining recruitment, improving candidate quality, and fostering longer employee tenure. Therefore, the integration of AI in HR operations is not just beneficial but increasingly necessary for competitive advantage in the banking industry.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made:

1. Commercial banks should invest in and implement AI-driven resume screening systems to enhance the efficiency and objectivity of the recruitment process, thereby improving employee retention outcomes.
2. Banks should expand the deployment of AI-powered chatbots in HR functions such as candidate engagement, onboarding, and employee support, given their proven impact on quality-of-hire and retention.
3. Continuous training and upskilling of HR staff are essential to maximize the benefits of AI technologies and ensure they are used ethically and effectively.
4. Regular assessment of AI tools should be conducted to ensure alignment with organizational goals, compliance with regulations, and mitigation of potential biases.

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APPENDIX A
QUESTIONNAIRE
Section A

Instructions: Tick the most appropriate response that appeals to you.

S/N	ARTIFICIAL INTELLIGENCE ADOPTION	1	2	3	4	5
1.	The use of AI-powered resume screening tools has improved the quality of candidates hired in our bank.					
2.	Chatbots and virtual assistants used during recruitment have enhanced candidate engagement and experience.					
	HIRING EFFICIENCY					
3.	The implementation of AI tools in recruitment has contributed to higher employee retention in our bank.					

4.	AI technologies have significantly reduced the time and effort required for initial candidate screening.					

APPENDIX B
SPSS OUTPUT

MVA VARIABLES=VAR00001 VAR00002 VAR00006 VAR00007 .

MVA

Notes

Output Created		18-JUN-2025 05:33:37
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>
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	N of Rows in Working Data File	60
Syntax		MVA VARIABLES=VAR00001 VAR00002 VAR00006 VAR00007 .
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

Univariate Statistics

	N	Mean	Std. Deviation	Missing Count	Missing Percent	No. of Extremes[a] Low	No. of Extremes[a] High
VAR00001	60	3.25	1.310	0	.0	0	0
VAR00002	60	3.35	1.325	0	.0	0	0
VAR00006	60	3.30	1.499	0	.0	0	0
VAR00007	60	3.40	1.330	0	.0	0	0

a. Number of cases outside the range (Q1 - 1.5*IQR, Q3 + 1.5*IQR).

DESCRIPTIVES VARIABLES=VAR00001 VAR00002 VAR00006 VAR00007
/STATISTICS=MEAN SUM STDDEV MIN MAX.

Descriptives

Notes

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Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.

	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=VAR00001 VAR00002 VAR00006 VAR00007 /STATISTICS=MEAN SUM STDDEV MIN MAX.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
The use of AI-powered resume screening tools has improved the quality of candidates hired in our bank.	60	1	5	195	3.25	1.310
Chatbots and virtual assistants used during recruitment have enhanced candidate engagement and experience.	60	1	5	201	3.35	1.325
The implementation of AI tools in recruitment has contributed to higher employee retention in our bank.	60	1	5	198	3.30	1.499
AI technologies have significantly reduced the time and effort required for initial candidate screening.	60	1	5	204	3.40	1.330
Valid N (listwise)	60					

FREQUENCIES VARIABLES=VAR00001 VAR00002 VAR00006 VAR00007
/ORDER=ANALYSIS.

Frequencies

Notes

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	N of Rows in Working Data File	60
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=VAR00001 VAR00002 VAR00006 VAR00007 /ORDER=ANALYSIS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

Statistics

		The use of AI-powered resume screening tools has improved the quality of candidates hired in our bank.	Chatbots and virtual assistants used during recruitment have enhanced candidate engagement and experience.	The implementation of AI tools in recruitment has contributed to higher employee retention in our bank.	AI technologies have significantly reduced the time and effort required for initial candidate screening.
N	Valid	60	60	60	60
	Missing	0	0	0	0

Frequency Table

The use of AI-powered resume screening tools has improved the quality of candidates hired in our bank.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	15.0	15.0	15.0
	2	6	10.0	10.0	25.0
	3	18	30.0	30.0	55.0
	4	15	25.0	25.0	80.0

	5	12	20.0	20.0	100.0
	Total	60	100.0	100.0	

Chatbots and virtual assistants used during recruitment have enhanced candidate engagement and experience.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	10.0	10.0	10.0
	2	9	15.0	15.0	25.0
	3	21	35.0	35.0	60.0
	4	6	10.0	10.0	70.0
	5	18	30.0	30.0	100.0
	Total	60	100.0	100.0	

The implementation of AI tools in recruitment has contributed to higher employee retention in our bank.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	15.0	15.0	15.0
	2	15	25.0	25.0	40.0
	3	3	5.0	5.0	45.0
	4	15	25.0	25.0	70.0
	5	18	30.0	30.0	100.0
	Total	60	100.0	100.0	

AI technologies have significantly reduced the time and effort required for initial candidate screening.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	10.0	10.0	10.0
	2	12	20.0	20.0	30.0
	3	9	15.0	15.0	45.0
	4	18	30.0	30.0	75.0
	5	15	25.0	25.0	100.0
	Total	60	100.0	100.0	

```
CORRELATIONS
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  /PRINT=TWOTAIL NOSIG
  /MISSING=PAIRWISE.
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Correlations

Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=VAR00001 VAR00002 /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

Correlations

		Resume Screening AI	Quality-of-Hire Efficiency
Resume Screening AI	Pearson Correlation	1	.915**
	Sig. (2-tailed)		.000
	N	60	60
Quality-of-Hire Efficiency	Pearson Correlation	.915**	1
	Sig. (2-tailed)	.000	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

```
CORRELATIONS
  /VARIABLES=VAR00001 VAR00002
  /PRINT=TWOTAIL NOSIG
  /MISSING=PAIRWISE.
```

Correlations

Notes

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Comments		
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	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	60
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=VAR00001 VAR00002 /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

Correlations

		Resume Screening AI	Retention Rate Efficiency
Resume Screening AI	Pearson Correlation	1	.607**
	Sig. (2-tailed)		.000
	N	60	60
Retention Rate Efficiency	Pearson Correlation	.607**	1
	Sig. (2-tailed)	.000	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

```
CORRELATIONS
  /VARIABLES=VAR00001 VAR00002
  /PRINT=TWOTAIL NOSIG
  /MISSING=PAIRWISE
```

Correlations

Notes

Output Created		18-JUN-2025 05:45:31
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	60
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.

Syntax		CORRELATIONS /VARIABLES=VAR00001 VAR00002 /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

Correlations

		Chatbots / Virtual Assistants AI	Quality-of-Hire Efficiency
Chatbots / Virtual Assistants AI	Pearson Correlation	1	.812**
	Sig. (2-tailed)		.000
	N	60	60
Quality-of-Hire Efficiency	Pearson Correlation	.812**	1
	Sig. (2-tailed)	.000	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

Notes

Output Created		18-JUN-2025 05:47:13
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	60
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=VAR00001 VAR00002 /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

Correlations

		Chatbots / Virtual Assistants AI	Retention Rate Efficiency
Chatbots / Virtual Assistants AI	Pearson Correlation	1	.727**
	Sig. (2-tailed)		.000
	N	60	60
Retention Rate Efficiency	Pearson Correlation	.727**	1
	Sig. (2-tailed)	.000	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).